

Basel Declaration | Allschwilerplatz 1 | PF | CH-4009 Basel www.basel-declaration.org | contact@basel-declaration.org

Advances in human and veterinary medicine through animal experiments

Animal experiments have a key function

Modern medicine has benefited substantially from pioneering discoveries of basic biological research and their implementation in applied research. Animal experiments are a fundamental pillar of biomedical research. They have a key function in the discovery of life processes, the elucidation of disease processes and the development of new medical procedures for humans and animals.

The importance of animal experiments for medical development is clearly illustrated in the list of Nobel Prizes awarded for Medicine and Physiology, which shows that animal experiments were directly involved in 75 of 98 Nobel Prizes. Almost every medical procedure is preceded by a long history of research in animal experiments. The discovery of insulin, antibiotics, the development of vaccines, and many other medicines would not have been possible without animal experiments. The same applies to modern diagnostics and surgery. The knowledge obtained from these experiments is also of benefit to pets and farm animals.

Many of the results obtained in animals can be extrapolated to humans

Current and future medical challenges will make major demands on science. To obtain new knowledge, develop new treatments and prevent diseases, we must all use all effective scientific methods. Wherever possible we use alternative methods, and only use animal experiments when absolutely essential. The importance of animal experiments is also shown by the fact that many – if not all – results obtained in animals can be extrapolated to humans.

Application of the 3R principle

Innovative basic research to obtain new findings and its implementation in applied research are inseparably interwoven with one another. In this way, new treatment methods have been successfully developed in recent times for rheumatoid arthritis, multiple sclerosis and a wide variety of cancers. Diseases of the nervous system are a current topic of international biomedical research that is dependent on animal experiments.

In animal experiments we are mindful of our responsibility toward the animals. Scientists are trying to reduce the use of and stress on animals by "Reduction, Refinement and Replacement" (the 3R principle). The welfare of animals is also important for a best quality research results.

Basel, 30th November 2010